

AMENDED SET OF CLAIMS

Please amend the claims as follows:

1. (Withdrawn) A method for producing a porous film, comprising the steps of casting a polymer solution comprising a polymer onto a substrate to form a film; and subjecting the film to phase conversion to thereby form a porous film, wherein the polymer constituting the porous film has a surface tension S_a [mN/m], wherein the substrate has a surface tension S_b [mN/m], and wherein S_a and S_b satisfy the following condition: $S_a - S_b \geq -10$.

2. (Withdrawn) The method for producing a porous film according to claim 1, further comprising the steps of casting a solution mixture as the polymer solution onto the substrate to form a film, and subjecting the film to phase conversion by bringing the film to a solidifying liquid to thereby form a porous film, the solution mixture comprising 8 to 25 percent by weight of a polymer component for constituting the porous film, 10 to 50 percent by weight of a water-soluble polymer, 0 to 10 percent by weight of water and 30 to 82 percent by weight of a water-soluble polar solvent.

3. (Withdrawn) The method for producing a porous film according to one of claims 1 and 2, further comprising the steps of holding the cast film in an atmosphere at a relative humidity of 70% to 100% and a temperature of 15°C to 90°C for 0.2 to 15 minutes, and bringing the film to a solidifying liquid comprising a nonsolvent for the polymer component.

4. (Currently Amended) A porous film having a large number of continuous micropores, wherein the film has a thickness of 5 to 200 μm , has an average surface pore size A of 0.7 to 10 μm and an average surface porosity C and has an average inside pore size B and an average inside porosity D,

wherein the ratio A/B of A to B is in the range of 0.3 to 3, and

wherein the ratio C/D of C to D is in the range of 0.7 to 1.5, and

wherein a polymer component forming the film comprises at least one selected from a group of amide-imide polymers, imide polymers, polyethersulfones, polysulfones, acrylic polymers or cellulose acetate, and

wherein a Gurley permeability of the porous film is from 0.2 to 29 seconds per 100 cc.

5. (Currently Amended) A porous film having a large number of continuous micropores, wherein the film has a thickness of 5 to 200 μm , has an average pore size A¹ of 0.7 to 10 μm at one surface, an average pore size A² of 0.7 to 10 μm at the other surface, an average porosity C¹ of 48% or more at one surface, and an average porosity C² of 48% or more at the other surface,

wherein the ratio A¹/A² of A¹ to A² is in the range of 0.3 to 3, and

wherein the ratio C¹/C² of C¹ to C² is in the range of 0.7 to 1.5, and

wherein a polymer component forming the film comprises at least one selected from a group of amide-imide polymers, imide polymers, polyethersulfones, polysulfones, acrylic polymers or cellulose acetate, and

wherein a Gurley permeability of the porous film is from 0.2 to 29 seconds per 100 cc.

6. (New) The porous film according to claim 4, wherein the Gurley permeability of the porous film is from 1 to 25 seconds per 100 cc.

7. (New) The porous film according to claim 4, wherein the Gurley permeability of the porous film is from 1 to 18 seconds per 100 cc.

8. (New) The porous film according to claim 5, wherein the Gurley permeability of the porous film is from 1 to 25 seconds per 100 cc.

9. (New) The porous film according to claim 5, wherein the Gurley permeability of the porous film is from 1 to 18 seconds per 100 cc.